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10/647,383	08/26/2003	Kotaro Kaneko	011350-320	2047
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BUCHANAN, INGERSOLL & ROONEY PC			SHAN, APRIL YING	
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			2135	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)
	10/647,383	KANEKO, KOTARO
	Examiner	Art Unit
	APRIL Y. SHAN	2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 November 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5, 11-14, 19 and 21-26 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5, 11-14, 19 and 21-26 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 November 2007 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Response to Amendment

1. The Applicant's amendment, filed 19 November 2007, has been received, entered into the record, and respectfully and fully considered.
2. As a result of the amendment, claims 1-2, 5, 11-14, 19 have been amended. Claims 6-10, 15-18 and 20 are canceled. Claims 21-26 are newly added claims. Therefore, Claims 1-5, 11-14, 19 and 21-26 are now presented for examination.
3. Any objection/rejection not repeated below is withdrawn due to Applicant's amendment.
4. The examiner acknowledges the replacement formal drawing of Fig. 6 and minor changes in the specification in order to correct typos.

Specification

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "A computer – readable medium" of claim 1-5 and 21-23 lacks antecedent basis in the specification. The Applicant's original disclosure in Par. [0094] discloses "a computer-readable recording medium". A computer-readable recording medium is slightly from a computer-readable recording medium since computer-readable medium includes signal and carrier wave.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-5 and 21-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 23 recites a computer-readable medium. However, the original disclosure does not expressly define/discloses a computer-readable medium. To a person with ordinary skill in the art, a computer-readable medium can include communication media, such as signal, carrier wave and etc. This subject matter is not limited to that which falls within a statutory category of invention because it is not limited to a process, machine, manufacture, or a composition of matter. Instead, it includes a form of energy. Energy does not fall within a statutory category since it is clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter. **Please note any amendment should be commensurate with its corresponding disclosure.**

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-2, 5, 11-12, 19, 21 and 24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over "Unix Communication Notes: 129" (provided by the Applicant,

Hereinafter Notes 129) in view of Murakami Seiji (English translated copy of Japan

Patent No. 5108487 provided by machine translation of JPO. Hereinafter Seiji).

As per **claims 1, 5, 11, 19**, Notes 129 discloses a computer

program/method/apparatus for a controlling apparatus intended to control an image forming apparatus, executing the procedures of:

confirming each file actually existing in a specified storage area of said controlling apparatus (e.g. Notes 129, pages 1-2) and judging a file, which is not included in a preset list of files that are required to exist in the specified storage area of said controlling apparatus to control the image forming apparatus among files whose existences have been confirmed, as an illegal file (the act of examining the change of an existing file list, obtained by using "find" from a file list prepared in advance by using a "diff command" recited in Notes 129, pages 1-2)

Notes 129 does not expressly disclose an illegal file resulting from computer virus infection.

However, Seiji discloses judging a program, which is not included in a preset list of programs that can be run to control (“...basic BIOS 7 is the program group which stored the basic motion of the computer, and is for controlling hardware 1” – e.g. par. [0010]) the image forming apparatus (“hardware 1...a printer” – e.g. par. [0009]) among programs whose running states have been confirmed, as an illegal program resulting from computer virus infection (“...judgment is required, comparison with the data of the database memorized beforehand is performed” – e.g. par. [0016], “to forbid the demand at least in the demand by a computer virus” – e.g. par. [0006] and “Thus, the existence of infection of a computer virus is distinguished by comparing with all the data of the database” – e.g. par. [0017]).

It would have been obvious to a person with ordinary skill in the art to replace Seiji’s function of checking virus with Notes 129’s function of checking of files against falsification. The shifting the function from checking the files against falsification to the function of checking virus is well known in the art to produce predictable results of ensuring security.

Seiji further discloses deleting or isolating the program that is judged as illegal program (“..to forbid the demand at least in the demand by a computer virus” – e.g. par. [0007] and “...spread after it can be prevented beforehand” – e.g. par. [0028]).

As per **claims 2, 12, 21 and 24**, Notes 129- Seiji discloses a computer program as applied above in claim 6. Seiji further discloses executes a procedure of automatically deleting or isolating the file that is judged as illegal file ("..to forbid the demand at least in the demand by a computer virus" – e.g. par. [0007] and "... spread after it can be prevented beforehand" – e.g. par. [0028]).

10. Claims 3-4, 13-14, 22-23 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Notes 129- Seiji as applied to claims 1-2, 5-7, 10-12, 15-16 and 19-20 above, and further in view of Yamamoto (U.S. Patent No. 5,881,151).

As per **claims 3-4, 13-14, 22-23 and 25-26**, Notes 129-Seiji does not expressly disclose wherein the procedure of judging includes a procedure of comparing the name of each file whose existence has been confirmed with the name of each file included in said list and wherein the procedure of judging includes a procedure of comparing the size of each file whose existence has been confirmed with the size of each file included in said list.

Yamamoto discloses wherein the procedure of judging includes a procedure of comparing the name of each file whose existence has been confirmed with the name of each file included in said list and wherein the procedure of judging includes a procedure of comparing the size of each file whose existence has been confirmed with the size of each file included in said list (e.g. col. 1, lines 56-64, col. 2, lines 8-20).

It would have been obvious to a person with ordinary skill in the art to incorporate Yamamoto's wherein the procedure of judging includes a procedure of comparing the

name of each file whose existence has been confirmed with the name of each file included in said list and wherein the procedure of judging includes a procedure of comparing the size of each file whose existence has been confirmed with the size of each file included in said list into Notes 129-Seiji.

The motivation of doing so would have been "the existence of infection by a computer virus can be discovered at an early stage, and the invasion and spread after it can be prevented beforehand", as disclosed by Seiji (par. [0029]).

Double Patenting

11. Claims 1 and 5 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 5 and 1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

12. Claims 2 and 21 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 21 and 2. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

13. Claims 3 and 22 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 22 and 3. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in

wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

14. Claims 4 and 23 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 23 and 4. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Response to Arguments

15. Applicant's arguments filed 19 November 2007 have been respectfully and fully considered but they are not persuasive.

16. The Applicant's arguments are summarized as below:

a. neither the existing file list nor the previously prepared list of NOTES 129 are disclosed or suggested as being a preset list of programs that can be run to control an apparatus other than the computer on which the file system is installed and Notes 129 does not disclose or suggest that any of these files stored in the file system of an apparatus (e.g., computer) can be used to control an image forming apparatus.

In response, the examiner respectfully disagrees. Firstly, the Applicant is respectfully reminded that One cannot show nonobviousness by attacking references individually where the rejections are based on combination of references. See *In re Keller*, 642 F. 2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F. 2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Second, it is well known in the art at the time of the invention in order for each apparatus to run,

there are computer software/instructions/commands running on a computing operating system in the background to control the operation. In this instance, NOTES 129 discloses computer commands operated in a Unix system to control an apparatus and this is generally understood and used in the art.

Therefore, NOTES 129 disclosed or suggested as being a preset list of programs that can be run to control an apparatus other than the computer on which the file system is installed and Notes 129 also discloses or suggest that any of these files stored in the file system of an apparatus (e.g., computer) can be used to control an image forming apparatus.

b. Seiji does not disclose or suggest that a program that is confirmed to be running on a controlling apparatus is judged to be an illegal program resulting from a computer virus infection when the program is not included in a list of programs that can be run to control an image forming apparatus.

In response, the examiner respectfully disagrees. Firstly, the Applicant is respectfully reminded that One cannot show nonobviousness by attacking references individually where the rejections are based on combination of references. See *In re Keller*, 642 F. 2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F. 2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Second, the act of judging the files not included in the table as illegal files ascribable to virus is nothing more than shifting from the function of checking the files against falsification of NOTES 129 to the function of checking virus. The function of checking virus is well known in the art and is disclosed

in Seiji ("...basic BIOS 7 is the program group which stored the basic motion of the computer, and is for controlling hardware 1" – e.g. par. [0010]) the image forming apparatus ("hardware 1...a printer" – e.g. par. [0009]) among programs whose running states have been confirmed, as an illegal program resulting from computer virus infection ("...judgment is required, comparison with the data of the database memorized beforehand is performed" – e.g. par. [0016], "to forbid the demand at least in the demand by a computer virus" – e.g. par. [0006] and "Thus, the existence of infection of a computer virus is distinguished by comparing with all the data of the database" – e.g. par. [0017]). It would have been obvious to a person with ordinary skill in the art to replace Seiji's function of checking virus with Notes 129's function of checking of files against falsification. The shifting the function from checking the files against falsification to the function of checking virus is well known in the art to produce predictable results of ensuring security.

c. One skill in the art would not have been motivated or have reason to modify Notes 129, Seiji and Yamaoto in such a manner as to result the subject matter in claims 1, 5, 11 and 19

In response, the examiner respectfully disagrees and responds that the examiner respectfully disagree and respond that KSR forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex parte Smith*, -- USPQ2d--, slip op. at

20, (Bd. Pat. App. & Interf. June 25, 2007) (citing KSR, 82 USPQ2d at 1396) (available at <http://www.uspto.gov/web/offices/dcom/bpai/fd071925.pdf>).

d. Dependent claims are likewise non-obvious and they are allowable.

In response, the examiner respectfully disagrees. Since the arguments for the independent claims are traversed, therefore, dependent claims are also not allowable.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April Y. Shan whose telephone number is (571) 270-

1014. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

14 February 2008
AYS

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2/15/08